



Supporting Statement

Peace Wood Quarry

Naylor Industries PLC

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Minerals
Waste
Environment

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1.0. Introduction

1.1. General

1.1.1. *MPG Ltd.* have been commissioned by *Naylor Industries PLC.* ('Naylor') to produce and submit a Planning Application for an extension to Peace Wood Quarry¹ ('The Site'), off Huddersfield Road, near Shelley, Huddersfield.

1.1.2. The proposed 2.4ha extension would occupy an area from the southern boundary of the existing quarry to Huddersfield Road to the south of The Site (see Plan ref: *320/1-Ext-1*).

1.1.3. Naylor have been manufacturing clay construction products for 130 years and require a consistent supply of a variety of raw materials (including clay) to continue producing their world-renowned clay-based products. Peace Wood Quarry, in particular, has a variety of clays with different properties, which are invaluable to the ceramic and brick industries.

1.2. Site Location

1.2.1. The Site is located to the north of Huddersfield Road, approximately 1.5km to the east of Shelley village and approximately 9km to the southeast of Huddersfield at grid reference SE 21642 11216 (see Plan ref: *320/1-Ext-1*).

1.3. Aims and Proposals

1.3.1. The primary aims of the application are:

- To extract approximately 200,000 tonnes of an important clay mineral resource at the site to predominantly supply the ceramics and brick-making industries.
- To restore The Site back to agricultural after-use and achieve a net gain in biodiversity.

¹ Also known as Shelley Quarry and occasionally referred to as 'the existing quarry' throughout this application.

1.4. The Applicant

1.4.1. Naylor have been manufacturing clay construction products for 130 years and successfully operate the existing quarry to the north, providing a variety of clays for their production processes.

1.5. Planning Application

1.5.1. The application as a whole contains the following:

- Introduction and Aims
- Site Description
- Operational Details
- Planning Policy Review
- Flood Risk Assessment
- Dust Management Scheme
- Waste Development Statement
- Restoration Scheme
- Noise Assessment
- PEA (and subsequent Biodiversity Net Gain Assessment)
- Hydrological Survey and Drainage Strategy
- Landscape and Visual Appraisal
- Heritage Impact Assessment
- Statement of Community Involvement
- Supporting Plans

2.0. Site Description

2.1. General Description

2.1.1. The Site is located to the north of Huddersfield Road, 500m to the east of the edge of Shelley village, and approximately 9km to the southeast of Huddersfield at grid reference SE 21642 11216 (see Plan ref: *320/1 – Ext-1*).

2.2. Site Description

2.2.1. The Site's current use is agriculture. The private access track from Huddersfield Road to the (currently) active Peace Wood Quarry currently leads through the middle of the proposed extension area.

2.2.2. The Site is bounded to the:

- North by, the currently active, Peace Wood Quarry.
- East by pastoral agriculture, a small area of woodland and a terrace of houses.
- South by Huddersfield Road.
- West by an agricultural field.

2.2.3. The total site area is approximately 2.4ha.

2.3. Topography

2.3.1. The Site's existing topography is a generally flat field. The elevation of The Site rises slightly from the east (approximately 192m AOD) to the west (approximately 202m AOD), as shown on Plan ref: *SQ/0922-01*.

2.4. Habitats and Species

2.4.1. A Preliminary Ecological Appraisal (Chapter 10) was carried out, which concluded that The Site is currently of limited ecological value. It states that the proposals offer opportunities to create additional habitats within The Site, as well as enhance existing habitats through the delivery of the proposed restoration scheme, including boundary woodland habitats and greater connectivity with the Kirklees

Wildlife Habitat Network.

2.5. Hydrology and Hydrogeology

2.5.1. The Site is not within a groundwater Source Protection Zone.

2.5.2. The Site is located entirely within Flood Zone 1. The Government's long term flood risk maps show the 'extent of flooding from rivers or sea' and the 'extent of flooding from surface water' as being 'very low' risk across The Site. This means the chance of flooding is less than 0.1% each year. Since The Site is greater than 1ha a Flood Risk Assessment has been carried out (Chapter 5).

2.5.3. The small stream, approximately 160m to the north of The Site, known as Baildon Dike, flows from west to east. It is located topographically lower than the base of extraction within a small valley.

2.5.4. A spring is also located some 60m southeast of the extraction area, which then flows towards the east.

2.6. Geology

2.6.1. British Geological Survey (BGS) mapping shows that The Site is underlain by the Penistone Flags geological unit, which forms part of the Pennine Lower Coal Measures Formation. This Formation predominantly consists of sandstones, siltstones, and mudstones.

2.6.2. Borehole logs drilled within the proposed extension area in 2018, as well as extensive evidence from the existing quarry, show the geology of The Site typically follows a sequence of topsoil, overlying a band of sandy clay. Beneath the clay is the sandstone of the Penistone Flags Unit, followed by a brown mudstone (the 'Toe Brown Shale') and a blue mudstone (the 'Blue Shale'), fireclay, a further clay band and then additional sandstone. Sampling and physical / chemical testing carried out by Naylor's showed the brown mudstone, blue mudstone and the fireclay are the geological horizons suitable for use in ceramics.

2.6.3. The sandstone varies significantly in thickness within the existing quarry to the

north, pinching out towards the north, and therefore its thickness and presence across the extension area is considered likely to be variable. Nevertheless, the incidental minerals (the sandstone and any clay unsuitable for ceramics) extracted would be exported from The Site should they be saleable or retained for use in restoration.

2.7. Rights of Way and Security

2.7.1. The Site entrance would be gated and locked outside of operational hours. Landowner access would be retained for the purposes of gaining entry to agricultural fields to the northeast.

2.7.2. There are no public rights of way crossing or adjacent to The Site.

2.8. Relevant Planning Permission

2.8.1. There is no planning history for The Site itself, however, the planning and allocation history at Peace Wood Quarry (north of The Site) can be considered relevant to this proposal.

2.8.2. Clay extraction at Peace Wood Quarry has been ongoing for at least 40 years. The first planning permission for the existing quarry is referenced: 87/62/02312.

2.8.3. 93/62/05383/E0 - Extraction of shales and clays by opencast means as an extension to the current site and subsequent landfill using imported clean excavation waste [Granted 20/03/1995].

2.8.4. 2007/70/92989/E0 - Variation of Condition 3 for continued extraction of mineral on previous permission 93/62/05383/e0 for extraction of shales and clays by opencast means as an extension to the current site and subsequent landfill using imported clean excavation waste [Granted 18/06/2009].

2.8.5. 2017/70/93602/E0 - Variation/removal of Conditions 2 and 60 on previous permission 2007/92989 for variation of Condition 3 for continued extraction of mineral on previous permission 93/62/05383/E0 for extraction of shales and clays by opencast means as an extension to the current site and subsequent landfill

using imported clean excavation waste [Granted 01/08/2018].

- 2.8.6. The eastern phases of extraction at Peace Wood Quarry have been infilled and restored in accordance with the extant planning permission, whilst the western phase(s) are currently operational and extracting clay.
- 2.8.7. The current end-date for extraction at Peace Wood Quarry is 31 October 2032, with restoration to be completed by 31 October 2034.
- 2.8.8. Peace Wood Quarry is allocated as a mineral extraction site (MES23), a Minerals Area of Search (MAS5) and a safeguarded waste site (WS60) in the Kirklees Local Plan (adopted 2019). Additionally, The Site itself is allocated as a Minerals Area of Search (MAS6).

3.0. Operational Details

3.1. General

3.1.1. The Site would occupy approximately 2.4ha as shown on Plan ref: *320/1 – Ext-2*. It is proposed that The Site would be operated as Peace Wood Quarry has been historically; excavation, followed by infilling with a suitable engineering fill material prior to restoration to agricultural pasture.

3.1.2. It is estimated that 200,000 tonnes² of clay, suitable for ceramics production, could be present at The Site. However, ceramic suitability can be variable, particularly at greater depths, so the final tonnage of appropriate clays may differ from this estimate. There is potentially a further 100,000 tonnes³ (approximately) of incidental mineral to be removed from The Site, though a proportion of this material could be retained for restoration as it may not be suitable for sale.

3.1.3. It is proposed to apply an end-date, via condition, of 31st December 2043. By which time both extraction and restoration would be completed.

3.2. Operations

Stage 1: Extraction

3.2.1. Extraction would commence from the west, working eastwards, and would operate independently from Peace Wood Quarry. It is noted that the lagoons to the north, as well as the drainage infrastructure would be retained as part of the existing quarry's restoration.

3.2.2. The phasing of extraction and the locations for storage of any stripped soils are shown on Plan ref: *320/1 – Ext-3*. A drainage scheme has been produced (see Section 11) which proposes an attenuation lagoon and a silt settlement lagoon. The

² The tonnage estimation is based on a density factor of 2 tonnes per m³, and the approximate total thickness of mudstones at The Site. MPG are not mineral surveyors, and this estimate has been produced for Planning purposes only.

³ Based on a density factor of 2.4 tonnes per m³, on the assumption that incidental mineral would be sandstone.

extraction area(s) could readily accommodate the lagoons (based on 2m depths), from which surface water would be pumped to drainage infrastructure directing water north to the existing silt settlement lagoons / Baildon Dike.

- 3.2.3. Incidental flagstone extraction would take place as per the current situation at Peace Wood Quarry. This would not be the main resource to be extracted. Retaining the sandstone on-site, which may be suitable for dimension stone end-uses, would not be considered logistically possible, sustainable nor economically prudent.
- 3.2.4. The extracted mudstone would be stockpiled within the excavated areas to be weathered down to clay, before being loaded on to HGVs and transported from The Site.
- 3.2.5. The following (but not limited to) vehicles / plant would be used on The Site:
 - 30 tonne excavator
 - D6 bulldozer
 - 30 tonne dump truck

Stage 2: Restoration and Aftercare

- 3.2.6. The proposed end use of the site is agriculture. Nevertheless, a Biodiversity Net Gain would be achieved through additional habitat creation.
- 3.2.7. Inert materials arriving at The Site for restoration purposes would first be required to pass all appropriate checks (for example those required under an Environmental Permit) before being directed to the area(s) currently under restoration, where site plant and machinery would emplace the materials as necessary. Whilst some, or all, of the restoration materials may not be classified as waste, a Waste Development Statement has been produced and is included as Chapter 7 of this Planning Application.
- 3.2.8. A schematic restoration scheme is included as Chapter 8. It is proposed that a detailed restoration scheme would be supplied through a suitable condition. An aftercare scheme would also be required by condition and would commence after

restoration is completed. A visualisation of the proposed restoration scheme is shown in Plan ref: 320/1 – Restoration-1.

3.2.9. A Biodiversity Net Gain assessment was carried out (Appendix 1), which concluded that the restoration scheme would deliver a net gain in biodiversity of 28.82% in terms of habitats, and 35.01% in terms of hedgerows. The calculation was carried out using the Defra Biodiversity Metric version 3.1.

3.2.10. Restoration is proposed to be completed by 31st December 2043.

3.3. Rate of Working

As is currently permitted at Peace Wood Quarry, it is proposed that mineral exportation from The Site would not exceed 1,200 tonnes per day Monday to Fridays and 650 tonnes on Saturdays.

3.4. Site Access / Vehicle Movements

3.4.1. The local road network has supported the HGV movements of the current Peace Wood Quarry and the proposed extension would not seek to increase the HGV movements in and out of The Site.

3.4.2. To export mineral and import engineering material, a maximum of 20 tonne HGVs would be used, as is currently restricted by condition for the existing site.

3.4.3. Whilst the internal access track would be removed as excavation progresses into Phase 2, it is intended that access through the quarry to both the existing quarry and agricultural fields to the north, would be retained at all times (for example, through the provision of ramps).

3.4.4. Whilst there would be no proposed change to the rate of working relative to the existing quarry, it is proposed that the following condition be attached to any planning permission for The Site:

“Minerals extracted at The Site shall not be removed from The Site at a rate of greater than 1,200 tonnes per day Monday – Friday, and 650 tonnes per day on Saturdays. In any event, the number of HGVs arriving at and leaving The Site shall

not exceed 60 (60 in and 60 out) on any single day, and no more than 30 (30 in and 30 out) on Saturdays. The totals provided in this condition must be considered to be cumulative, in that any HGVs using the site entrance to access the existing quarry to the north of The Site for restoration purposes, shall be subtracted from the total number consented by this condition on any given day. Daily records of the number of HGVs using the site entrance shall be kept for the lifetime of this permission, and will be made available to the Mineral Planning Authority within 3 days of a written request.”

- 3.4.5. The above condition would ensure that there is no uplift in HGV movements to or from The Site over and above the existing usage, by limiting the total numbers using both the proposed extension and the existing quarry for the purposes of restoration.

3.5. Hours of Working

- 3.5.1. It is proposed to maintain the current permitted operating hours for Peace Wood Quarry. The Site would operate between the following hours:

Monday to Friday: 0700 to 1730 hours

Saturday: 0800 to 1230 hours

- 3.5.2. The Site would not operate on Saturday afternoons, Sundays, or bank holidays other than to carry out emergency maintenance of plant and equipment.

3.6. Water Management / Hydrology

- 3.6.1. A suitable drainage scheme has been designed (see Section 11). The drainage scheme utilises drainage ditches, attenuation lagoon(s) and settlements lagoon(s), which would be accommodated within the quarry void, before being pumped from the quarry in order to ultimately discharge to Baildon Dike.

- 3.6.2. Continued monitoring of groundwater and surface water is taking place in relation to the operational Peace Wood Quarry, in the restored Peace Wood Quarry and the proposed extension area (The Site).

3.7. Exporting and Importing Materials

- 3.7.1. Only minerals won at The Site would be exported. All stripped soils, overburden and / or interburden would be retained on site for use in restoration.
- 3.7.2. Only materials intended for the purposes of restoration would be imported to The Site. Whilst it is possible that imported materials would be waste, there are alternative schemes (such as DoW: CoP) that could mean that imported materials are not considered waste. Additionally, some primary materials may be required as part of the restoration. Control over these materials would, where appropriate, be through an Environmental Permit, and no waste would be imported to The Site until such a Permit has been acquired.

3.8. Noise

- 3.8.1. A Noise Assessment has been carried out and is included as part of this planning application in Chapter 9.
- 3.8.2. An initial noise assessment was carried out which specified that any works would need to be carried out at a distance of at least 170m from residential properties. As a result, the layout of the site was updated to consider this distance with a 170m buffer zone implemented from the nearest residential properties to mitigate any potentially harmful noise impacts from the development.
- 3.8.3. Screening bunds around the southern perimeter of The Site would also be constructed, which would provide both auditory and visual screening.
- 3.8.4. Only plant and machinery with white noise reversing alarms would be used at The Site.

3.9. Landscape Impact

- 3.9.1. Screening bunds along the southern perimeter of The Site would be constructed, which would provide visual screening.
- 3.9.2. A Landscape and Visual Impact Assessment has been carried out and is included as part of this planning application in Chapter 12. It concluded:

“Following a review of baseline information, together with consideration of the potential landscape and visual effects arising from the proposal, it is considered that the application site is able to successfully accommodate the temporary change in land use, in landscape and visual terms, without having an unacceptable effect or loss of landscape character or visual amenity upon the wider study area.”

3.10. Dust / Air Quality

3.10.1. It is not considered likely that the proposals would produce unacceptable quantities of dust beyond The Site’s boundaries. Nevertheless, a Dust Management Scheme has been produced as part of this application (Chapter 6).

3.11. Final Restoration

3.11.1. A schematic restoration scheme has been submitted as part of this planning application (see Chapter 8 and Plan ref: *320/1 – Restoration-1* and *320/1 – Restoration-2*). The restoration scheme seeks to return the land to an agricultural field with additional woodland planting to provide habitats and deliver biodiversity net gains.

3.11.2. The final restoration profile would be achieved as detailed in the Waste Development Statement (Chapter 7) and a detailed Restoration Scheme would be submitted through an appropriate Condition.

4.0. Introduction

4.1. General

4.1.1. This policy assessment will assess the proposals against relevant Planning Policies.

4.1.2. The provision of the Town and Country Act (1990) indicates a presumption in favour of development proposals which are in accordance with the Development Plan.

4.1.3. The National Policy and Development Plan for this proposal is a combination of the following documents, so far as they are relevant:

- The National Planning Policy Framework (2021)
- Kirklees Council Local Plan (2019)

4.2. National Planning Policy Framework

4.2.1. The National Planning Policy Framework (NPPF) was adopted in 2012 and most recently updated in 2021. It is supplemented by National Planning Policy Guidance (NPPG). Its purpose is to set out the Government's planning policies for England and how these should be applied on a local level.

4.2.2. The Site is within the Green Belt. The NPPF sets out five main purposes which the Green Belt serves in paragraph 138. These are:

"a) to check the unrestricted sprawl of large built-up areas.

b) to prevent neighbouring towns merging into one another.

c) to assist in safeguarding the countryside from encroachment.

d) to preserve the setting and special character of historic towns.

e) to assist in urban regeneration, by encouraging the recycling of derelict and other urban land."

- 4.2.3. The proposals clearly do not conflict with purposes a), b), d) or e).
- 4.2.4. Purpose (c) concerns encroachment. Paragraph 137 of the NPPF states *"The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open"*.
- 4.2.5. However, Paragraph 150 of the NPPF concerns developments which may be considered as not inappropriate in the Green Belt. It states:
- "Certain other forms of development are also not inappropriate in the Green Belt provided they preserve its openness and do not conflict with the purposes of including land within it. These are:*
- a) mineral extraction"*
- [...]
- 4.2.6. Therefore, considering National Policy, although The Site is within a Green Belt, the proposed mineral extraction is not necessarily inappropriate. Openness is not readily defined. However, openness can be considered in a spatial and a visual sense, and so is not limited to simply whether the land is accessible.
- 4.2.7. A Landscape and Visual Assessment (LVA) was carried out by Collington Winter as part of this Planning Application and is included as Chapter 12. It concluded:
- "Following a review of baseline information, together with consideration of the potential landscape and visual effects arising from the proposal, it is considered that the application site is able to successfully accommodate the temporary change in land use, in landscape and visual terms, without having an unacceptable effect or loss of landscape character or visual amenity upon the wider study area."*
- 4.2.8. The impact on spatial openness is considered negligible as the proposals would have no impact over and above that of the existing quarry, as The Site would also

consist of an access track from the main road and a quarry behind screening bunds. Furthermore, the proposed site is considerably smaller at just over one third of the size of Peace Wood Quarry. This is reinforced by the findings of the LVA which states:

“This LVA finds that the proposal will have a low to negligible magnitude of effect on the overall character of the county & district landscape and would not affect the scale, landform, or pattern of the wider landscape character. The resultant landscape impact, at the country/district landscape scale is assessed as being neutral and the character and quality of the surrounding landscape, as set out in the published LCA [Kirklees District Landscape Character Assessment] will be maintained, with a minor change in land-use.”

Whilst there is no built development currently on The Site, the enclosed nature (with dry stone walls bounding The Site on the south) and the existing quarry access track mean that The Site is not currently ‘open’ in a spatial sense, and as operations would be predominantly below the current surface level, it is not considered that there would be any noticeable effect on the spatial openness of The Site.

4.3. Kirklees Council Local Plan (2019)

4.3.1. The Kirklees Local Plan (‘Local Plan’) was adopted on 27 February 2019 and reflects National Policy contained within the National Planning Policy Framework (‘NPPF’). The Local Plan is comprised of the Strategies and Policies document and the Allocations and Designations document.

4.3.2. Paragraph 1.26 of the Local Plan outlines Kirklees’ overarching priority of the Local Plan; *“to deliver long term sustainable growth ensuring that the council takes into account the three pillars of sustainable development – economic, environmental and social”*.

4.3.3. Policy LP1 states a *“Presumption in favour of sustainable development”*. The proposed extension to Peace Wood Quarry would constitute sustainable development in all three pillars, which is demonstrated throughout this policy assessment. The proposed extension would directly ensure the continued employment of those currently working at Peace Wood Quarry, as well as the wider employment impact through the supply chain. The proposals would deliver greater economic sustainability by providing raw materials for the ceramics industry. The environmental pillar has been addressed through the associated supporting studies, with mitigation measures employed for any potential negative impacts, and the resultant biodiversity net gains delivered through the restoration of The Site. The social pillar is considered to be addressed not only through the employment at The Site, but also through delivering materials for products used to make commodities vital for infrastructure, housing and society.

4.3.4. Policy LP21 discusses highways and access. It states:

“Proposals shall demonstrate that they can accommodate sustainable modes of transport and be accessed effectively and safely by all users.

New development will normally be permitted where safe and suitable access to the site can be achieved for all people and where the residual cumulative impacts of development are not severe.

Proposals shall demonstrate adequate information and mitigation measures to avoid a detrimental impact on highway safety and the local highway network. Proposals shall also consider any impacts on the Strategic Road Network.

All proposals shall:

a. ensure the safe and efficient flow of traffic within the development and on the surrounding highway network;

- b. where needed, provide new infrastructure or improvements on or off site to ensure safe access from the highway network for pedestrians, cyclists, public transport users and private vehicles;*
 - c. be accompanied by a supporting Transport Assessment or Transport Statement where the development would generate significant trip generation, providing detail as to the impact on highway safety, air quality, noise and light restrictions;*
 - d. take into account changes in site levels and topography to ensure the development can be accessed easily and safely by all sections of the community and by different modes of transport;*
 - e. take into account the features of surrounding roads and footpaths and provide adequate layout and visibility to allow the development to be accessed safely;*
- [...]"

- 4.3.5. The Site would utilise the pre-existing access to Peace Wood Quarry from Huddersfield Road; and access to the existing quarry and agricultural fields would be maintained throughout Phase 2 of extraction (see *Drawing ref: 320/1 – Ext-3*). The proposed operation would not increase HGV numbers. There are no footpaths or other public rights of way on or adjacent to the site. It is considered that the proposals would not increase any potential impact upon the highway over and above the current operations at Peace Wood Quarry and thus would be compliant with Policy LP21.
- 4.3.6. Policy LP24 concerns design. Whilst this policy appears to be directed at built development, it has nevertheless been considered. For example, the soil storage bunds will be seeded with an appropriate grass and / or wildflower seed mix upon completion of their construction. The restoration scheme also seeks to assimilate the restored site into the landscape, whilst also enhancing biodiversity.
- 4.3.7. Policy LP27 concerns flood risk. The site is entirely within Flood Zone 1. Furthermore, the Government’s long term flood risk maps show the ‘extent of

flooding from rivers or sea’ and the ‘extent of flooding from surface water’ as being ‘very low’ risk across The Site¹. This means the chance of flooding is less than 0.1% each year. However, as The Site is greater than 1ha in area, a Flood Risk Assessment has been carried out and is included as Chapter 5. It concluded the risk of flooding from all sources to be very low.

4.3.8. Policy LP28 details the drainage requirements for development in Kirklees. It states:

“The presumption is that Sustainable Drainage Systems (SuDS) will be used to assist in achieving the following on each site:

a. for proposals on greenfield sites, typical greenfield run-off rates should not be exceeded;

[...]

c. No negative impact on local water quality and improvements in water quality where practicable;

[...]

There will be a general presumption against pumping surface water. It must also be demonstrated that the surface water management solution is designed to meet requirements over the lifetime of the development including evidence that management and maintenance arrangements have been secured to cover that period. This includes ensuring proposals to store water meet national standards and latest best practice.

[...]”

4.3.9. Concerning part a., as part of the Drainage Strategy (Chapter 11) produced for this application, the greenfield run off rates were calculated using a SuDS method. It states:

¹ <https://check-long-term-flood-risk.service.gov.uk/risk>

“In order to inform the limited discharge rate and sizes of the proposed ditch(es), greenfield runoff rates have been estimated using the ICP SUDS method within MicroDrainage.”

- 4.3.10. Concerning point c., it is not considered a negative impact on local water quality would occur. In compliance with Policy LP28, the proposal would utilise a Sustainable Drainage System (SuDS) to ensure the run-off rate does not increase because of the development, as detailed in the Drainage Strategy. The Drainage Strategy includes the creation of a sediment settling pond to reduce the likelihood of pollution from suspended solids.
- 4.3.11. The pumping of surface water would only be a temporary measure for excess water during the quarry’s operation. Upon restoration, The Site’s drainage would return to pre-existing conditions.
- 4.3.12. The Site is not within a groundwater Source Protection Zone. However, boreholes were installed at The Site in 2018 and are regularly monitored. Whilst these boreholes do appear to report perched groundwater, evidence in the adjacent quarry faces suggest that these are isolated pockets of saturated sandstone, as no groundwater is present or seeping from any section of the quarry faces. Therefore, it is not considered that any significant groundwater bodies would be affected, and that, should small volumes of perched groundwater be removed during excavations, no interconnectivity with the water table, or other perched groundwater exists, and the effects would therefore be negligible.
- 4.3.13. In addition to the above, as the nature of proposed materials for infilling is inert, the risk of pollution of groundwater and / or surface water is very low.
- 4.3.14. Policy LP30 outlines the measures to be taken by development for biodiversity and geodiversity. It states:

“The council will seek to protect and enhance the biodiversity and geodiversity of Kirklees, including the range of international, national and locally designated wildlife and geological sites, Habitats and Species of Principal Importance and the Kirklees Wildlife Habitat Network.

[...]

Biodiversity and Development

Development proposals will be required to:-

(i) result in no significant loss or harm to biodiversity in Kirklees through avoidance, adequate mitigation or, as a last resort, compensatory measures secured through the establishment of a legally binding agreement;

(ii) minimise impact on biodiversity and provide net biodiversity gains through good design by incorporating biodiversity enhancements and habitat creation where opportunities exist;

(iii) safeguard and enhance the function and connectivity of the Kirklees Wildlife Habitat Network at a local and wider landscape-scale unless the loss of the site and its functional role within the network can be fully maintained or compensated for in the long term;

(iv) establish additional ecological links to the Kirklees Wildlife Habitat Network where opportunities exist; and

(v) incorporate biodiversity enhancement measures to reflect the priority habitats and species identified for the relevant Kirklees Biodiversity Opportunity Zone.”

- 4.3.15. The Site is within the Pennine Foothills Biodiversity opportunity area. This is an area of North Kirklees which is characterised by rolling countryside with a mix of woodland, hedgerows and primarily agricultural pastureland. The Site would be operated to a high standard and the restoration (see Chapter 8) and aftercare of The Site would ensure the final landform and species planted are in keeping with the Pennine Foothills, through tree planting on boundaries as guided by the PEA,

while also achieving a biodiversity net-gain of 28.82% in terms of habitats, and 35.01% in terms of hedgerows (see Appendix 1).

4.3.16. Policy LP32 considers landscape. It states:

“Proposals should be designed to take into account and seek to enhance the landscape character of the area considering in particular:

- a. the need to protect the setting and special qualities of the Peak District National Park, views in and out of the park and views from surrounding viewpoints;*
- b. the setting of settlements and buildings within the landscape;*
- c. the patterns of woodland, trees and field boundaries;*
- d. the appearance of rivers, canals, reservoirs and other water features within the landscape.”*

4.3.17. Any potential landscape impact of the development during operation would be mitigated using a perimeter bund. A Landscape and Visual Appraisal (LVA) has been carried out and concluded:

“Whilst the scale of the proposal will have a major adverse effect upon the application site, the scale of the proposal, when seen within the wider agricultural landscape, will be reduced and the wider landscape has the capacity to accommodate the type of temporary change in landscape character without significantly effecting its overall integrity.”

4.3.18. Furthermore, the LVA determines that the resultant landscape impact of the site *“is anticipated to reduce to moderate adverse upon completion of the restoration phase and minor neutral 15 years post completion of the restoration, as the restored agricultural grassland and soft landscape planting matures.”*

4.3.19. Policy LP33 concerns trees. It states:

“The Council will not grant planning permission for developments which directly

or indirectly threaten trees or woodlands of significant amenity.

Proposals should normally retain any valuable or important trees where they make a contribution to public amenity, the distinctiveness of a specific location or contribute to the environment, including the Wildlife Habitat Network and green infrastructure networks.

Proposals will need to comply with relevant national standards regarding the protection of trees in relation to design, demolition and construction. Where tree loss is deemed to be acceptable, developers will be required to submit a detailed mitigation scheme.”

- 4.3.20. It is not considered this application would have a detrimental impact on trees on or adjacent to The Site. No trees would be removed as part of the development and additional tree planting is included in the restoration scheme. The proposals seek to enhance trees in the area and would deliver a long-term gain in woodland / tree numbers.
- 4.3.21. LP34 outlines the Council’s expectations of the water environment around any development. It states:

“Proposals must:

- 1. Ensure no deterioration of water courses or water bodies (including groundwater) by conserving and, where practicable, enhancing:
 - a. the natural geomorphology of watercourses, including reinstating watercourses to their natural state through removal of modifications resulting from past industrial uses;*
 - b. water quality; and*
 - c. the ecological value of the water environment, including the functionality of habitat networks.**

2. Ensure Source Protection Zones are protected from contamination as a result of the proposal in line with national guidance.

3. Dispose of surface water appropriately (in accordance with the Local Plan drainage policy) adhering to the following networks in order of preference:

a. to an infiltration-based system wherever possible (such as soakaways);

b. discharge into a watercourse with the prior approval of the landowner, navigation authority or Environment Agency, where applicable. To comply with part 1 of this policy this must be following treatment where necessary or where no treatment is required to prevent pollution of the receiving watercourse; c. discharge to a public sewer.

Proposals are encouraged to:

4. Make positive progress towards achieving 'good status or potential' under the Water Framework Directive in surface and groundwater bodies.

5. Manage water demand and improve water efficiency through appropriate water conservation techniques including rainwater harvesting and grey-water recycling as well as considering water availability from surface water and groundwater sources.

6. Improve water quality through the incorporation of appropriately constructed and maintained Sustainable Drainage Systems and surface water management techniques taking into account the sensitivity of groundwater."

4.3.22. The water environment is discussed in paragraphs 4.3.10 to 4.3.13.

4.3.23. Policy LP35 considers the historical environment. It states:

{...}

3. Proposals should retain those elements of the historic environment which

contribute to the distinct identity of the Kirklees area and ensure they are appropriately conserved, to the extent warranted by their significance, also having regard to the wider benefits of development. Consideration should be given to the need to:

a. ensure that proposals maintain and reinforce local distinctiveness and conserve the significance of designated and non-designated heritage assets;

[...]

d. identify opportunities, including use of new technologies, to mitigate, and adapt to, the effects of climate change in ways that do not harm the significance of heritage assets and, where conflict is unavoidable, to balance the public benefit of climate change mitigation measures with the harm caused to the heritage assets' significance;

e. accommodate innovative design where this does not prejudice the significance of heritage assets;

[...]"

4.3.24. There is a grade II listed building approximately 400m to the west of The Site (Church of Emmanuel) and a number of others within 1km, as listed in the LVA (Chapter 12). A Heritage Impact Assessment (Chapter 14) considers the potential impact of the proposals on this listed building, and concluded that the extension *"will have no impact on the significance of the Grade II listed Emmanuel Church."*

4.3.25. In addition, the LVA concluded that *"there is no intervisibility between the listed buildings and/or the landscape settings of the sites and the application site, due to distance and intervening vegetation and built form."*

4.3.26. Policy LP36 outlines the requirements of proposals for mineral extraction:

"Part 1

Proposals for mineral extraction will be considered having regard to:

a. the impact on the environment including water resources and the best and the

most versatile agricultural land;

b. the impact on residential amenity, highway safety and local heritage assets;

c. the impact on human health;

d. any cumulative effects arising from multiple impacts from individual sites and/or a number of sites in a locality.

Part 2

Proposals to explore for, or extract minerals, including from former waste deposits will be permitted provided that they will not:

a. cause unacceptable detriment to the landscape including its character or local visual amenity during or subsequent to extraction;

b. be materially detrimental to interests of nature conservation, cultural heritage, geological or archaeological importance;

c. cause nuisance or materially significant disturbance to local residents as a consequence of the generation of dust, noise or vibration by site operations or associated transport;

d. prejudice highway safety through the volume or nature of vehicle movements generated;

e. result in pollution of water resources or soils or the interruption of land drainage;

f. cause materially significant permanent change to local rights of way networks;
or

g. result in permanent loss of best and most versatile agricultural land.”

Proposals to extract minerals should be accompanied by sufficient information to demonstrate that such unacceptable impacts would not occur, or could be satisfactorily controlled, and to demonstrate the presence of and need for the mineral.

Subject to compliance with the above criteria the Council will support development proposals for the provision of local stone types which are

specifically required to carry out heritage asset repairs within the district.

In the case of mineral extraction from restored waste sites additional consideration will be given as to whether the material to be extracted can be considered a substitute for natural aggregates or a suitable cover material for landfill sites, and whether an alternative unrestored source of the material is available locally.

The council, in conjunction with the other West Yorkshire councils, will seek to maintain a landbank of permitted reserves of aggregates, and also seek to maintain its contribution to meeting its share of the aggregates demand in the region on the advice of the Yorkshire and Humberside Regional Aggregates Working party, unless exceptional circumstances prevail.”

- 4.3.27. The proposed clay quarry would be in compliance with part 1 of policy LP36. The proposal would not have an unacceptable environmental impact as The Site would be operated in compliance with the Development Plan with the support of suitable studies, as detailed in this document, with recommended mitigation carried out.
- 4.3.28. With regards to Part 2, The Site would be suitably screened from the adjacent road to the south and the terrace of houses to the east to mitigate visual impact by limiting views into the extraction area. An initial noise assessment was carried out which determined any workings should be carried out at a minimum distance of 170m from the residential receptors to the southeast and southwest of The Site. As a result, the site boundary was reviewed, and the extraction area reduced to only the northern sections of the fields south of Peace Wood Quarry to reduce any detrimental noise impacts of workings at The Site. A revised Noise Impact Assessment was carried out, and is included as Chapter 9 of this report, which concluded *“no significant impact is expected on the most affected [Nearest Sensitive Receptor]”*.

- 4.3.29. The local road network supports the HGV movements of the current Peace Wood Quarry, and the proposed extension does not seek to increase the HGV movements in and out of The Site.
- 4.3.30. A suitable drainage scheme (see Section 11) has been produced and would be implemented throughout operation of The Site.
- 4.3.31. The Site is currently agricultural, bounded by stone walls or fences. Upon restoration, it is anticipated a 22.82% (habitats) and 35.01% (hedgerows) biodiversity net-gain would be made as calculated by the independent BNG assessment included in Appendix 1 (document ref: *CW20-382 R1*).
- 4.3.32. A Heritage Impact Assessment was carried out – see Chapter 14.
- 4.3.33. The Site is small, and extraction would occur on a campaign basis. HGV movements would not exceed existing and potential visual and noise impacts of The Site would be mitigated with screening bunds (and stand-off) as detailed above.
- 4.3.34. The Site would be restored to permanent pasture, and so would not result in the permanent loss of agricultural land.
- 4.3.35. Furthermore, Paragraph 15.13 states:
- “The Council will also support the continuation of [...] clay/shale provision from existing quarries and, providing they can be accommodated in an environmentally acceptable manner, proposals for the extension of established quarries will be supported.”*
- 4.3.36. The proposals would be an extension to the existing Peace Wood Quarry and are therefore supported by paragraph 15.13.
- 4.3.37. Policy LP37 details the restoration and aftercare requirements of mineral sites. It

states:

Part 1

Mineral working will be permitted only where the council is satisfied that the site can be restored and managed to a high standard, the proposed restoration is sympathetic to the character and setting of the wider area and is capable of sustaining an appropriate after-use. Restoration proposals for mineral workings should be designed to:

- a. clearly indicate how the site will be restored and managed, before, during and after working;*
- b. ensure that restoration is completed at the earliest opportunity including the use of progressive restoration techniques where appropriate;*
- c. ensure that restoration and aftercare is appropriate with regard to the characteristics of the site's surroundings, including landscape character;*
- d. demonstrate that adequate financial provision has been made to fulfil the proposed restoration and aftercare requirements; and*
- e. include, where appropriate, provision for the extended management of a site beyond any aftercare period required by planning condition.*

Part 2

Mineral working will be permitted only where the proposed site restoration delivers benefits such as enhancement of biodiversity interests, improved public access and the provision of climate change mitigation. Restoration proposals should therefore include:

- a. measures to assist or achieve priority habitat or species targets and/or biodiversity Action Plan targets;*
- b. where appropriate, measures to protect and/or improve geodiversity and provide educational opportunities to visit such sites;*

c. provision for increased flood storage capacity for sites which fall within high flood risk areas;
d. where appropriate, opportunities to provide for local amenity uses, including appropriate sport and recreational uses; and
e. measures to restore land back to agriculture for sites involving the best and most versatile agricultural land.”

4.3.38. The operator, Naylor, has restored the historic areas of Peace Wood Quarry to the north-east of The Site to a high standard. This restored area of Peace Wood Quarry is now used for pastoral agriculture. As part of this planning application, a restoration scheme has been proposed (and is included as Chapter 8) which would deliver biodiversity net gain for The Site and retain agricultural land in the long-term (Appendix 1).

4.3.39. The Site is within the Green Belt. Paragraph 19.7 states:

“In addition, the NPPF sets out those types of development which may not be inappropriate in the Green Belt, such as buildings for agriculture and forestry and other uses of land that maintain openness, or small-scale development that supports existing uses.”

4.3.40. As discussed in paragraph 4.2.2 mineral extraction is a type of development which is not classed in the NPPF as inappropriate in the Green Belt.

4.3.41. Policy LP43 requires waste developments to consider the principles of the waste hierarchy. The Site may use waste to restore the topography to the proposed restoration contours, and it would be intended that, if approved by the Environment Agency, the restoration would be a Recovery (as opposed to disposal) operation. Alternatives schemes where waste is recovered or used as a resource would also be explored.

4.3.42. Policy LP44 considers the location of new waste management facilities. Whilst

this policy focuses on the location of new facilities, which cannot be changed in this case as any waste management would be tied to the location of the quarry, the principles would be considered and adhered to, in that *“potentially adverse impacts on people, biodiversity and the environment can be avoided or adequately mitigated.”*

- 4.3.43. Policy LP46 discusses disposal of waste. As above, the restoration would likely be carried out through Recovery. In any event, the policy requires that disposal operations are carried out only for the purposes of restoring quarry voids, and using only inert materials.
- 4.3.44. Policy LP51 requires developments to consider potential impacts upon air quality. Whilst it is not considered that the proposals would have unacceptable impacts on air quality, there is a low risk that dust could be mobilised by winds during dry and / or windy periods. Therefore, a dust management scheme has been created, and included in this application as Chapter 6. Additionally, it is noted that the operations at The Site would be carried out using the same techniques as the existing quarry, where there have been no adverse impacts from dust.
- 4.3.45. Policy LP52 is wide ranging and states that developments that cause pollution would not be permitted. This application contains a number of assessments and proposed mitigation measures that mean that no unacceptable pollution would occur. Additionally, the proposals would lead to an improvement to the existing environment, through the demonstrated biodiversity net gain that the restoration scheme delivers.

4.4. ‘Need’

- 4.4.1. The need for the specific clay(s) found at Peace Wood Quarry are vital for Naylor to continue the supply of clay construction products. The termination of the supply of this resource would require a change to the blend(s) of clay that is used to manufacture their ceramic products which could impact the type of product

- produced by the applicant. This is recognised by the Local Plan in paragraph 5.19.
- 4.4.2. As stated in Policy LP36 (see paragraph 4.3.26) and Appendix 2 (Monitoring Framework) of The Local Plan, a 'landbank' of 25 years should be maintained for clay and shale. However, paragraph 5.33 of the *2017 Kirklees Local Plan Technical Paper: Minerals* states the clay and shale reserve will be exhausted in 18 years (by 2035). Whilst National Policy provides clarification and / or caveats to the 25-year requirement, Appendix 2 of the Local Plan states that the target required to confirm that Policy LP36 has been successful is a 25-year landbank for clay and shale.
- 4.4.3. Considering the above, there is a clear and demonstrable need for the proposed extension to Peace Wood Quarry. The need is demonstrated through both the wider viewpoint in terms of maintaining / contributing to the landbank, and the more specific viewpoint of maintaining the supply of a variety of clays with particular properties required by Naylor to produce their products.
- 4.5. Conclusion
- 4.5.1. The proposed development is for a 2.4ha extension to Peace Wood Quarry to extract clay before restoration utilising overburden and engineering material.
- 4.5.2. The proposal would be compliant with both National and Local policy. Suitable assessments have been carried out and subsequent mitigation measures have been considered and would be put in place to ensure these constraints do not present unacceptable adverse impacts.
- 4.5.3. There is a demonstrable need for this development. The clay resource at The Site is needed by Naylor to achieve the correct blend of materials to manufacture their sustainable clay piping and other ceramic construction products. Additionally, Kirklees does not currently have a landbank of 25 years for clay as required in the Local Plan.

5.0. Flood Risk Assessment

5.1. General

5.1.1. This Flood Risk Assessment (FRA) assesses the potential risk of flooding as a result of the proposed extension to of Peace Wood Quarry ('The Site'). The proposals involve the stripping of topsoil and sub-soils at The Site before the extraction of clay and incidental sandstone, followed by infilling for the purposes of restoration to agricultural pasture.

5.1.2. This FRA will assess the level of risk of flooding at The Site from any source, and whether the proposals will increase flood risk elsewhere.

5.2. Site Description

5.2.1. The proposed Peace Wood Quarry extension is located to the north of Huddersfield Road, 500m to the east of the edge of Shelley village, and approximately 9km to the southeast of Huddersfield at grid reference SE 21642 11216. The Site would occupy an area of some 2.4ha.

5.2.2. The Site's current use is pastoral agriculture (sheep grazing). The private access track from Huddersfield Road to the currently active Peace Wood Quarry cuts through the middle of the proposed extension area (and would be re-routed as part of the development for Phase 2). The Site is bounded to the north by the currently active Peace Wood Quarry; east by pastoral agriculture, a small area of woodland and a terrace of houses; south by agricultural fields and Huddersfield Road; and west by an agricultural field.

5.2.3. The Site's existing topography is generally flat. The elevation of The Site rises slightly from the east (192m AOD) to the west (202m AOD).

5.2.4. There are no surface water courses within The Site, however there is a spring approximately 60m southeast of the extraction area, from which water flows (predominantly only during winter months) eastwards and away from The Site, and three lagoons north of The Site created as part of the drainage scheme for Peace Wood Quarry, which discharge to a stream to the north known as Baildon

- Dike.
- 5.2.5. The underlying geology is the Penistone Flags geological unit, which forms part of the Pennine Lower Coal Measures Formation. This Formation predominantly consists of sandstones, siltstones, and mudstones. The existing quarry shows that at this locality, the Penistone Flags unit is not continuous, and is underlain by the clays to be extracted.
- 5.2.6. The Site is located entirely within Flood Zone 1 (lowest risk).
- 5.3. Development Proposals
- 5.3.1. The proposed development is a (relatively) small-scale clay quarry working on a campaign basis. Extraction would be preceded by stripping of the topsoil and sub-soils (to be retained for use in restoration).
- 5.3.2. It is proposed to extract in two phases, as shown on Plan ref: *320/1 - Extraction Plan-1*. Phase 1 would be in the western field and Phase 2 would be the eastern field.
- 5.3.3. The Flood Risk and Coastal Change guidance¹ states that mineral extraction is classes as a 'less vulnerable' development.
- 5.3.4. The development has a proposed end-date of 31st December 2043, by which time The Site would be restored. The lifetime of the proposed development has been considered within this FRA, and it is emphasised here that the development (and indeed all mineral extraction) is a temporary development.
- 5.4. Risk Assessment
- 5.4.1. The Site is entirely within Flood Zone 1 and is not within an area with critical drainage problems as notified by the Environment Agency. However, as The Site's surface area is greater than 1ha, an FRA is required.
- 5.4.2. The Government's long term flood risk maps show the 'extent of flooding from

¹ <https://www.gov.uk/guidance/flood-risk-and-coastal-change#Table-2-Flood-Risk-Vulnerability-Classification>

rivers or sea' and the 'extent of flooding from surface water' as being 'very low' risk across The Site. This means the chance of flooding is less than 0.1% each year.

5.4.3. Kirklees's Strategic Flood Risk Assessment² (SFRA) was published in 2016. Its key purposes were to:

- *"identify and analyse current and future broad scale flooding issues for key locations in Kirklees local authority area;*
- *provide support for further assessment and sequential testing of planning applications; and*
- *support the Local Plan process."*

5.4.4. Localised maps have been produced to show the strategic flood risk for the whole County. The Site is shown on flood risk map "OO – Skelmanthorpe", which confirms The Site is not within Flood Risk Zone 2 and 3 and, therefore, has low risk of flooding. There is no further information specific to The Site or the proposals within the SFRA.

5.4.5. Extraction would not take place below the water table, and therefore the risk from groundwater flooding is considered to be negligible.

5.4.6. Within the quarry void, drainage ditches and an attenuation lagoon, followed by a settlement lagoon, would be used to collect excess surface water that enters the site (via precipitation). Water would then be pumped to existing drainage infrastructure for the existing quarry (which would be retained post-restoration of both site areas) and ultimately discharge into Baildon Dike. It is unlikely that The Site would be worked over the winter (instead being worked on spring / summer 'campaigns').

5.4.7. Nevertheless, there remains a residual risk of 'flash floods' from extreme precipitation events when surface water cannot percolate into the ground fast enough.

² <https://www.kirklees.gov.uk/beta/planning-policy/strategic-flood-risk-assessment.aspx>

- 5.4.8. Such flash floods are usually short-lived events whereby a very low-level flood exists for a very short period of time and would only have the potential to impact operatives at The Site or plant and equipment. Should such an extreme precipitation event occur, then emergency plans to temporarily evacuate The Site (or areas of The Site subject to the flash flood) would be enacted. Such circumstances would be at the discretion of the Site Manager. No working at The Site would resume until it has been declared safe to do so by the Site Manager. Equally, during periods of no working, for example over winter, prior to the recommencement of working, a visual inspection of any collected surface water would be carried out, and excess pumped from The Site. During periods of no working, The Site would also be inspected during periods of precipitation, in order to pump excess surface water if required.
- 5.4.9. The effects of climate change have also been considered for this FRA. In accordance with guidance from the Environment Agency (EA), it is recommended that for the period 2015 to 2039, the upper ('worst case scenario') estimate for increases in rainfall is +10%. Whilst this risk assessment is qualitative as the initial risk (based on Flood Zones etc.) is low, it is considered that increases in precipitation amounts due to climate change would have a negligible effect on the risk assessed and a quantitative assessment is not required. However, quantitative assessments for the drainage design have been carried out. For more details see Section 11.
- 5.5. Summary
- 5.5.1. The Site is located entirely within Flood Zone 1 and long-term flood risk maps show the extent of flooding to be very low.
- 5.5.2. A Drainage Strategy has been produced by Waterco and is included as Chapter 11. An attenuation pond, sediment pond and drainage ditches would be used to manage any excess surface water, and direct water to the lagoons to the north of Peace Wood Quarry as recommended in the Drainage Strategy.
- 5.5.3. The risk of flooding from all sources, both at and way from The Site, is considered to be very low.

- 5.5.4. The only minor residual risk to operatives on site is from “flash floods”. Should a flash flood occur, it will be at the Site Manager’s discretion as to whether The Site, or areas at risk, are temporarily evacuated during such an event.

6.0. Dust Management Scheme

6.1. This Dust Management Scheme for the proposed Peace Wood Quarry extension ('The Site') forms part of a planning application for the extraction of mudstone/clay and infilling with engineering material prior to restoration to agricultural pasture.

6.2. This document outlines the procedures to be implemented in order to assess and minimise the potential impacts from dust produced by The Site and the control measures in place to mitigate the risk.

6.3. Sources, Releases, and Impacts

6.3.1. The plan referenced: *320/1 - Ext Location-1* identifies The Site's location and boundary.

6.3.2. Sources of dust at The Site would be minimal due to the nature of the clay material being worked. However, any potential dust emissions are limited to the following activities:

- Transporting materials along internal haul roads during prolonged dry periods.
- Loading and unloading of materials during prolonged dry periods.
- Processing of materials (limited to weathering of the mudstone on site) during prolonged dry periods.
- Stockpiles of material stored on The Site during prolonged dry periods.

6.3.3. The pathway for dust would be through emissions to air. The nearest sensitive receptors are residential properties approximately 74m southwest of The Site (separated by the B6116) and residential properties approximately 110m to the southeast of The Site. There is a further residential property and some farm buildings approximately 250m west of The Site (separated by a field).

6.3.4. Historical data taken from nearby weather stations for Shelley¹ suggest the prevailing wind is predominately from the southwest (Figure 1). It is therefore highly likely that in the extremely unlikely event of emissions to air that any dust mobilised by wind would be blown away from the residential receptors to the southwest and southeast of The Site. Nonetheless, with the risk being low to start with, the operational measures described in this document would be the best approach to mitigate any unacceptable adverse impact due to dust.

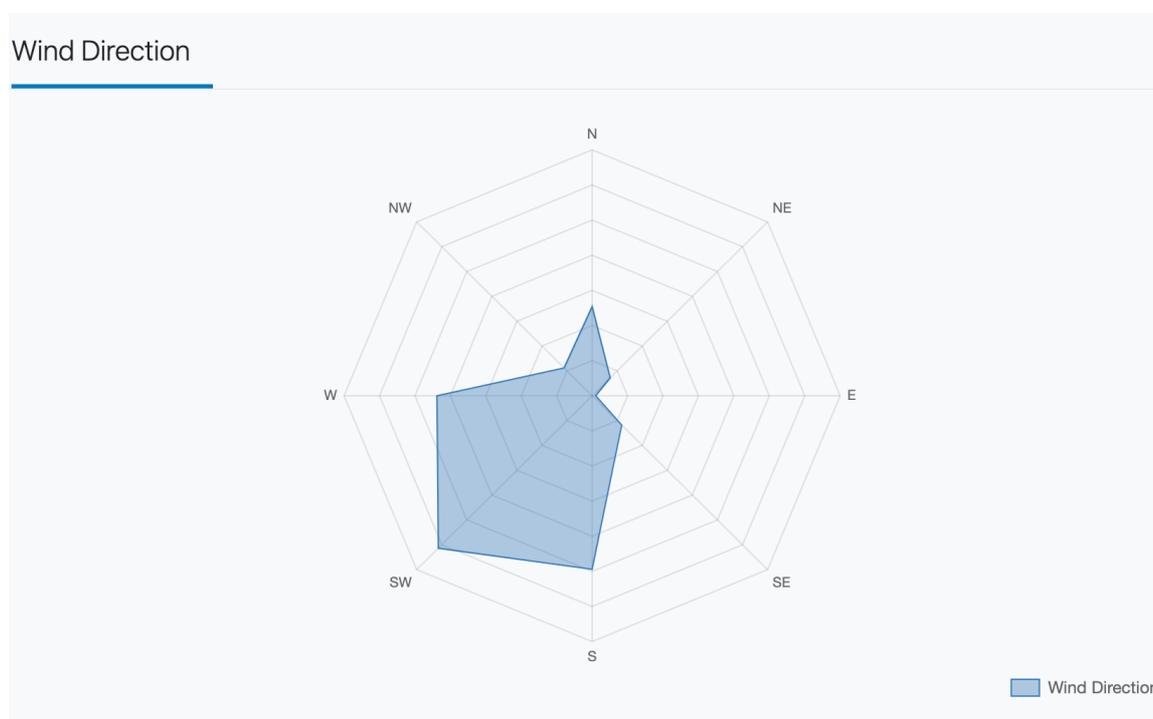


Figure 1: Wind rose indicating the prevailing wind directions for Shelley between 01/01/2017 and 01/08/2022.

Source: [Meteostat](https://meteostat.net/en/place/gb/shelley?s=03347&t=2017-01-01/2022-08-01)

6.4. Dust Control Measures

6.4.1. A water bowser will be available on site for dust suppression in all climatic conditions.

¹ <https://meteostat.net/en/place/gb/shelley?s=03347&t=2017-01-01/2022-08-01>

6.4.2. A series of dust mitigation measures would be implemented on site to ensure dust emissions are controlled as far as is practically possible. The measures include:

- 10mph speed limit for all vehicles travelling through The Site.
- Sheeting of vehicles transporting potentially dusty loads off site, and all vehicles visually inspected upon entering and leaving The Site.
- The entrance to The Site would be comprised of a sealed surface and road sweepers will be regularly deployed.
- Site layout designed to minimise the transportation of material around The Site.
- Use of mobile bowser to damp down stockpiles; vehicle running surfaces; vehicle loads; to prevent excessive dust formations, especially during dry and windy conditions.
- Cleaning of any spillages using wet cleaning methods.
- Stockpiles will be kept to a minimum as operating conditions allow.
- Drop heights always minimised to prevent dust emissions.

6.4.3. During unusually dry and / or windy conditions, and, at the discretion of the Quarry Manager, stockpiles (or other areas) that are generating dust would be wetted down. This would be carried out as often as is necessary to prevent excessive dust generation. During such exceptional weather conditions, the stockpiles could be wetted down before closing The Site each day, if it is considered that dust could be generated outside of operational hours. It would be at the Quarry Manager's discretion as to whether it is necessary to source equipment and / or staff to carry this out.

6.5. **Monitoring**

6.5.1. All operational staff, as part of their induction, are made aware of their roles and responsibilities. Site operatives will continuously carry out visual dust emission inspections whilst The Site is in operation and will report to the Quarry Manager

for advice if required. Where, in the opinion of the Quarry Manager, dust is being generated beyond an acceptable level, mitigation measures would be implemented.

6.5.2. As well as visual monitoring for dust, The Site's boundary would be checked daily to safeguard against material having the potential to cause a nuisance outside of the Site boundary.

6.5.3. Events and any corrective action should be recorded in the site diary. The site diary should record the following:

- Wind strength and direction.
- Activities being carried out at the time of the incident.
- Nature of the emission (fine dust, grit, etc.).
- Extent of emission (density, distance travelled, etc.).
- Impact on any surrounding receptors.

6.6. **Dust Contingency Measures**

6.6.1. Elevated Dust Issues

6.6.1.1. Dust issues identified are reported to the Quarry Manager at the earliest opportunity and an investigation into the source of the elevated dust levels would be carried out, also at the earliest opportunity and in any event, within one working day of it being reported. The outcome of the dust investigation and any proposed actions required will be reported in The Site diary and actioned at the earliest possible opportunity.

6.6.1.2. Any operational failings would be assessed to consider where retraining of staff may prevent or reduce the likelihood of an incident reoccurring and the retraining would be actioned at the earliest opportunity. Training will be documented in the Site Diary and a training record created and maintained with

appropriate review dates specified.

6.6.1.3. Any dust monitoring that may be required as part of an investigation will be carried out by a suitably qualified consultant. The quarry manager will inform the Mineral Planning Authority, where necessary, during / after the process following an elevated dust issue complaint.

6.6.2. Reporting Measures

6.6.2.1. Any complaints or elevated dust issues will be recorded in the site diary.

6.7. **Emergency Plans**

6.7.1. An emergency with regards to dust management would be the loss of control of dust emissions which could have an unacceptable impact on the identified sensitive receptors.

6.7.2. If an event is considered an emergency, the Quarry Manager would immediately assess the situation and a decision would be made as to whether the site should suspend operations until the elevated dust issue is controlled. The measures required would be considered on a case-by-case basis. Operations would not be restarted until an investigation into the cause of the emergency is completed, and any required operational or mitigation measures have been altered or updated.

6.7.3. Dust Complaint Procedure

6.7.3.1. Any complaints follow the operator's complaint procedure and are recorded in the site diary. An investigation into the complaint will be actioned within one working day of receipt unless further investigation is required.

6.7.3.2. An investigation will be carried out into the cause for the complaint and the complainant is contacted (where requested) with the outcome of the investigation and the action taken to prevent further incidents.

6.7.3.3. Management Plans should be reviewed following the receipt of complaints.

6.8. Responsibilities and Review

6.8.1. It is the responsibility of the Quarry Manager to oversee the operations on site and to be sufficiently trained and familiar with the management systems at The Site. The Quarry Manager will have the responsibility of ensuring that appropriate control measures are in place to reduce the potential for dust impact. Regular meetings will be held to discuss ongoing and planned operations that have the potential to generate elevated dust emissions.

6.8.2. The Dust Mitigation Scheme and associated control measures are reviewed on an annual basis and / or following a complaint or elevated dust issue.

6.9. Summary

6.9.1. Whilst it is considered unlikely that operations at The Site would give rise to unacceptable dust emissions, particularly beyond The Site's boundaries, a range of appropriate mitigation measures are proposed to control dust emissions if considered necessary.

7.0 Waste Development Statement

- 7.1. This Waste Development Statement (WDS) provides the necessary detail on the basis that waste would be imported to The Site for the purpose of restoration.
- 7.2. The proposed restoration scheme seeks to infill The Site, bringing ground levels back to original levels. It is, therefore, accepted that materials would be required to be imported to The Site to achieve this. However, it is not guaranteed that all or any of these materials would be classified as waste. There are schemes such as DoW:CoP that, if utilised, would mean the imported materials would not be considered waste. Equally, primary materials could also be physically and chemically suitable for the restoration.
- 7.3. Nevertheless, it is accepted that some or all imported materials could be waste.
- 7.4. The National Planning Policy for Waste (NPPW) states that when determining Planning Applications, the determining authority should, *“concern themselves with implementing the planning strategy in the Local Plan and not with the control of processes which are a matter for the pollution control authorities. Waste planning authorities should work on the assumption that the relevant pollution control regime will be properly applied and enforced”*.
- 7.5. Any waste importation would be strictly controlled through an Environmental Permit, which would require its own management systems, pollution control measures, environmental risk assessments and monitoring. The Permit would include controls on waste acceptance, and procedures for rejecting non-conforming loads.
- 7.6. It is likely that any waste operations at The Site would constitute a Recovery operation. Waste Recovery means a non-waste would have to be used in the place of waste, in this case because there would be an obligation (the approved restoration scheme) to restore The Site regardless of the materials used. Waste Recovery uses a strict list of acceptable waste codes, and also requires both approval of a Waste Recovery Plan (WRP) and an Environmental Permit before any

importation can occur.

- 7.7. The following list of wastes shown in Table 1 is typically acceptable at sites with deposit for Recovery permits and is provided as an example of the likely wastes that would be accepted at The Site. Regardless of the final list of accepted wastes, it is proposed that all wastes would be inert, and would not generate an unacceptable risk of pollution, odour, or pests.

Table 1: Waste codes typically accepted at Deposit for Recovery sites.

Waste Code	Description
01 01 02	Wastes from non-metalliferous excavation
01 04 08	Waste gravel and crushed rocks other than those containing dangerous substances
01 04 09	Waste sand and clays
02 04 01	Soil from cleaning and washing beet
10 12 08	Waste ceramics, bricks, tiles, and construction products (after thermal processing)
10 13 14	Waste Concrete
17 01 01	Concrete
17 01 02	Bricks
17 01 03	Tiles and ceramics
17 01 07	Mixtures of concrete, bricks, tiles, and ceramics
17 03 02	Bituminous mixtures other than those mentioned in 17 03 01
17 05 04	Soils and stones (topsoil, peat, subsoil, and stones)
19 12 09	Minerals (such as sand and stones) from the treatment of waste aggregates that are otherwise naturally occurring minerals - excludes fines from treatment of any non-hazardous waste or gypsum from recovered plasterboard
19 12 12	Crushed bricks, tiles, concrete, and ceramics, including mixtures of materials – excludes fines from treatment of any non-hazardous waste or gypsum from recovered plasterboard
20 02 02	Soil and stones (topsoil, peat, subsoil, and stones)

8.0. Restoration Scheme

8.1. General

8.1.1. This document describes the features included in the restoration scheme for the proposed Peace Wood Quarry extension ('The Site') and forms part of a planning application for the extraction of mudstone/clay and restoration infilling.

8.1.2. The restoration scheme supporting the planning application is intended to be schematic in order to show the proposed restoration features, general topographic profile, and allow for a measurement of biodiversity net gain. A Detailed Restoration Scheme would be required by condition should Planning Permission be granted. The Detailed Restoration Scheme would include additional information, such as specific species for planting and / or seeding, percentage mixes of planting and / or seeding, and any planting or seeding methodology. The detailed restoration scheme would also be accompanied by an aftercare scheme.

8.1.3. Nevertheless, details of the restoration features and habitat creation are included in this restoration scheme, with a proposed landform and generalised species recommendations. The details included in this restoration scheme are considered proportionate and suitable for the determination of the planning application, and in accordance with the requirements of Policy LP37 of the Kirklees City Council Local Plan (2019).

8.1.4. This document should be read in conjunction with Plans references: *320/1 – Restoration-1, 320/1 – Restoration-2* and *SQ/0922/PA-05*.

8.2. Site Description

8.2.1. The Site currently consists of agricultural fields and an internal haul road for Peace Wood Quarry.

8.2.2. The total site area measures some 2.42ha.

8.3. Restoration Scheme Aims

8.4. The primary aims of this restoration scheme are as follows:

- To restore the land to agriculture.
- To achieve a net gain in biodiversity and enhance habitat connectivity.
- To visually assimilate The Site into the surrounding landscape.

8.5. Restoration Scheme Features

Tree Planting and Mixed Scrub

8.5.1. Trees would be planted in the approximate locations shown on Drawing ref: *320/1 – Restoration-2*. On the north-western boundary is some existing woodland scrub. The scheme proposes to enhance this area with additional tree planting, for example in any gaps, depending on its condition once extraction and infilling has ceased. Other new tree planting would be carried out prior to extraction commencing at The Site.

8.5.2. In addition, to further enhance the area of trees on the north-western boundary, an area of mixed scrub is proposed. This area could be created either by planting or seeding, or a combination of both, details of which would be provided with the detailed restoration scheme.

8.5.3. Species would be selected to be locally appropriate, likely matching existing species at or near to The Site. Some suggested species are provided in section 8.6.

Internal Access and Infrastructure

8.5.4. All infrastructure, and internal haul routes would be grubbed up and / or removed. No sealed surface would be retained except for at the entrance area leading to the access gate. This ensures that a suitable access for farming vehicles will be retained for The Site's future use. Internally, access to the fields to the north would be informal and no surfaced route would be retained.

Extraction Area

- 8.5.5. The extraction area would be infilled using a combination on unsaleable minerals and imported materials. Any waste imported to The Site would be strictly controlled by an Environmental Permit or equivalent. The proposed topographic profile of the restored site is shown in drawing ref: *SQ/0922/PA-05*.
- 8.5.6. The subsoil and topsoil previously stripped from the area would be re-spread across the extraction area to provide a suitable substrate for plant growth, and the extraction area would be seeded with an agricultural grassland seed mix suitable for low intensity permanent pasture.
- 8.5.7. The species mix and any specific seeding methodology (such as sowing rate) would be provided in the detailed restoration scheme.

Tall Ruderal Area

- 8.5.8. An area on the western boundary of The Site will be seeded with tall ruderal species such as Meadowsweet, Wild Angelica, Woundwort and Lady Fern.

Drystone Walls and Fencing

- 8.5.9. A new drystone wall would be constructed on the eastern boundary (currently delineated by a fence in poor state of repair) of The Site as shown on drawing ref: *320/1 – Restoration-2*. On the western boundary, new fencing would be installed to enclose the tall ruderal area and woodland / mixed scrub on the western and north-western boundary.
- 8.5.10. Drystone walls would also be retained to enclose the sealed surface entrance area.
- 8.5.11. Existing field gates would be retained to allow future access to fields.

8.6. Restoration Scheme Recommended Species

Grassland Seed Mix

8.6.1. A suitable agricultural grassland seed mix would be seeded in the restored extraction area. Whilst the species mix including percentages would be provided in the detailed restoration, suggested species are provided below:

- Perennial Rye Grass (*Lolium perenne*)
- Red Fescue (*Festuca rubra*)
- Cocksfoot (*Dactylis cristatus*)
- Common Bent (*Agrostis capillaris*)
- Cow Parsley (*Anthriscus sylvestris*)
- Broad-Leaved Dock (*Rumex obtusifolius*)

Woodland / Mixed Scrub Planting

8.6.2. An appropriate planting mix would be chosen for this area and provided in the detailed restoration scheme. Based on the existing ecological surveys to date, suggested species would include:

- Hawthorn (*Crataegus monogyna*)
- Ash (*Frazinus excelsior*)
- Sycamore (*Acer pseudoplatanus*)
- Elder (*Sambucus nigra*)
- Oak (*Quercus robur*)

8.7. Final Landform

8.7.1. The final proposed landform is shown in drawing ref: *SQ/0922/PA-05*. The proposed topography seeks to match the topographic profile prior to extraction at The Site, and so the final topography of the site would remain generally flat.

8.7.2. The final landform would assimilate The Site into its surroundings and produce a landscape feature that is congruent with both the likely historic appearance of The Site, and the landscape within which it is located.

8.8. Biodiversity Net Gain

8.8.1. The Biodiversity Net Gain (BNG) for this restoration scheme has been calculated and shows the proposed scheme would deliver a net gain of +22.82% (habitats) and +35.01% (hedgerows). The full calculation and analysis are included as Appendix 1.

8.9. Summary

8.9.1. Several restoration features are proposed across The Site to achieve the aims of the scheme. These include grassland seeding, tree planting, mixed scrub, tall ruderal species seeding, new drystone walls and stock-proof fencing. The proposed features would deliver a biodiversity net gain of +22.82% and +35.01% for habitats and hedgerows respectively.